

THE CLAIMS

1. A flexible connector comprising:

a length of corrugated tubing having a distal
end;

5 an end piece having a proximal end;

a length of polymeric tubing surrounding the
distal end of length of corrugated tubing and the proximal
end piece for initially retaining the proximal end of the
end piece in engagement with the distal end of the length
10 of corrugated tubing; and

a sleeve surrounding the length of polymeric
tubing, the proximal end of the end piece, and the distal
end of the length of corrugated tubing for permanently
retaining the proximal end of the end piece in engagement
15 with the distal end of the length of corrugated tubing.

2. The flexible connector according to claim 1
wherein the end piece further comprises a plurality of
corrugations comprising the proximal end thereof.

3. The flexible connector according to claim 2 wherein the length of polymeric tubing engages the corrugations of the end piece and the corrugations comprising the distal end of the length of corrugated tubing to retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

4. The flexible connector according to claim 3 wherein the length of polymeric tubing resiliently engages the proximal end of the end piece and the distal end of the length of corrugated tubing.

5. The flexible connector according to claim 3 wherein the length of polymeric tubing is heat shrunk into engagement with the proximal end of the end piece and the distal end of the length of corrugated tubing.

6. The flexible connector according to claim 1 wherein the sleeve is crimped to permanently retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

7. The flexible connector according to claim 1 further including a length of mesh tubing surrounding the length of corrugated tubing, the length of polymeric tubing, and the proximal end of the end piece.

5 8. The flexible connector according to claim 7 wherein the end piece further comprises a plurality of corrugations comprising the proximal end thereof.

10 9. The flexible connector according to claim 8 wherein the length of polymeric tubing engages the corrugations of the end piece and the corrugations comprising the distal end of the length of corrugated tubing to retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

15 10. The flexible connector according to claim 9 wherein the length of polymeric tubing resiliently engages the proximal end of the end piece and the distal end of the length of corrugated tubing.

11. The flexible connector according to claim 9 wherein the length of polymeric tubing is heat shrunk into engagement with the proximal end of the end piece and the distal end of the length of corrugated tubing.

5 12. The flexible connector according to claim 7 wherein the sleeve is crimped to permanently retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

13. A method of manufacturing a flexible connector comprising the steps of:

providing a length of corrugated tubing having a distal end;

5 providing an end piece having a proximal end;
positioning the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing;

providing a length of polymeric tubing;

10 extending the length of polymeric tubing over the proximal end of the end piece and the distal end of the length of corrugated tubing;

utilizing the length of polymeric tubing to initially retain the proximal end of the end piece in
15 engagement with the distal end of the length of corrugated tubing;

providing a sleeve;

positioning the sleeve in alignment with the length of polymeric tubing, with the proximal end of the
20 end piece, and with the distal end of the length of corrugated tubing; and

crimping the sleeve and thereby permanently retaining the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

14. The method according to claim 13 wherein the step
of providing a length of polymeric tubing is carried out
by providing a length of flexible polymeric tubing and
wherein the step of utilizing the length of polymeric
5 tubing to initially retain the proximal end of the end
piece in engagement with the distal end of the length of
corrugated tubing is carried out by resiliently engaging
the length of resilient polymeric tubing with the proximal
end of the end piece and with the distal end of the length
10 of corrugated tubing.

15. The method according to claim 13 wherein the step of providing a length of polymeric tubing is carried out by providing a length of heat shrink polymeric tubing and wherein the step of utilizing the length of polymeric
5 tubing to initially retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing is carried out by directing radiation into the length of heat shrink polymeric tubing and thereby shrinking the length of tubing into engagement with the
10 proximal end of the end piece and with the distal end of the length of corrugated tubing.

16. The method according to claim 13 including the additional of extending a length of mesh tubing around the exterior of the length of corrugated tubing, around the
15 proximal end of the end piece, and around the length of polymeric tubing, and wherein the step of positioning the sleeve is carried out by positioning the sleeve around the exterior of the length of mesh tubing.